. Hab. Island of Ticao, Philippines (found under stones at low water); Cuming.

The ridges of this very delicate and pretty shell are slightly nodulous, and prickly on the angle.

MITRA PATULA. Mitr. testá ovatá, tenuiculá, ventricosiusculá, lævigatá; cinereá, fusco hic illic variegatá et nebulatá; columellá quadriplicatá; aperturá amplá; labro tenui, supernè sinuato.

Conch. Icon., Mitra, pl. 39. f. 333.

Hab. ____?

Very distinct from any form of the genus I have met with.

MITRA ALVEOLUS. Mitr. testă abbreviato-ovată, spiræ suturis profunde impressis; longitudinaliter subtiliter plicato-costată, basi transversim sulcată; anfractibus inferne aterrimis, superne albis, nigro tessellatis; columellă quadriplicată.

Conch. Icon., Mitra, pl. 39. f. 334.

Hab. ——?

A characteristic tessellated species, from the collection of Thomas Norris, Esq.

ENTOMOLOGICAL SOCIETY.

January 1st, 1844.-The President in the Chair.

An extract from a letter addressed by the Rev. Mr. Savage to the Rev. F. W. Hope was read, giving an account of the capture of a new species of Goliath Beetle on the west coast of Africa, *Mecynorhina Savagii* (Harris, Journ. of Boston Nat. Hist. Soc. vol. iv. pl. 21; Westw. Arc. Ent. ii. pl. 81. f. 1, 2).

Extracts were also read from two letters addressed to Mr. Hope by C. D. E. Fortnum, Esq., giving some account of the entomology in the neighbourhood of Port Adelaide, and mentioning some particulars respecting the reproduction of the limbs in a species of *Phasmida*, Diura violascens, Gray, a larva of which (about one inch long and having much the appearance of a Bacillus) had its left intermediate leg broken off when captured. It fed on the young leaves of the gumtree, Eucalyptus, and grew very fast. On the first moult after the accident a small leg appeared on the old stump, but with a withered appearance, and apparently the joints were not formed. At the second moult the leg had grown to half its natural size, with all the joints perfect. The third moulting produced the pupa with the leg about two-thirds of the original size. On the change to the imago the limb had regained its full size. Mr. Fortnum adds, that the young Phasmidæ invariably eat the old skin after moulting. He also mentions the capture of a species of Mantispa and one of Ascalaphus. In a subsequent communication he mentions the capture of several apparently new species of *Phasmidæ*, and states that *Diura violascens* and roseipennis are the sexes of the same species, having reared several from the larva. He had collected a great many species of ants, and several new predaceous beetles (including a beautiful Harpalus with

the head and thorax splendid green); likewise several new aquatic beetles and *Buprestidæ*, and two new species of *Onthophagus*; but he had met with no *Necrophaga*. The little insect allied to *Elaphrus* is exceedingly abundant, and he had collected three species of *Adelotopus*, one described by Mr. Hope in Trans. Ent. Soc. vol. i., and two others; he had also seen one or two more, and had collected another species of *Scarites*, a species of *Trox* (very abundant), nine *Melolonthidæ*, three species of *Mantispa* and seven of *Myrmeleon*.

In reference to the Phasmidæ noticed by Mr. Fortnum, the President stated that he considered Mr. Fortnum's communication to be one of great interest, as affording a further proof that reproduction of the limbs takes place in true insects. He also stated that he is equally sure that reproduction of lost parts takes place in the Myriapoda, as he formerly expressed his belief when exhibiting an instance of what he regarded as the first noticed occurrence of this fact in a Scolopendra, at the meeting of this Society in November 1839. In consequence of the suggestions made by Mr. Westwood on that occasion, that the limb in the specimen in question had not been reproduced, but was only an instance of retarded development of the original limb, and at a subsequent meeting of the Society (November 2, 1840), Mr. Newport had instituted a series of experiments on the Iulidæ and Lithobii, in which reproduction both of the antennæ and legs had taken place, and in one instance the reproduction of some of the legs was repeated a second time in the same individual Lithobius. He stated also that reproduction of lost parts does not take place after the individual has acquired, or has very nearly attained its adult size.

Mr. Marshall also stated that he had observed a specimen of the common species of Blatta, one of the legs of which was much smaller than the rest.

Mr. Yarrell mentioned, in reference to the continued growth of the limbs in the *Crustacea*, that it appeared to have its limits, as he had observed lobsters several years old which had certainly not lately cast their shells, which they did not fill.

An extract was also read from a letter addressed by Colonel Hearsey to Mr. Westwood, giving an account of the habits of a minute species of the genus *Diopsis*, in India.

This species is very closely allied to Say's *D. brevicornis**, and was captured by Colonel Hearsev in different months and various localities; some on window-panes in June, some on orange and citron leaves in gardens in July, and some in the middle of August on cucumber leaves; they appear to feed either on the sweet deposit of

* It may be thus characterized :

Diopsis Hearseiana, W. Brevis, robusta; capite fulvo, nigro vario, cornubus oculiferis abbreviatis crassis, apice nigris; thorace grisco-nigro, spinâ brevi utrinque sub basin alarum aliisque duabus, apicalibus albidis longè setigeris; abdomine nigro nitido; pedibus flavescentibus, femoribus anticis intùs fusco maculatis, tibiisque anticis nigris, alis hyalinis. Long, corp. lin. 2; expans. alar. lin. 4. the Aphis, or on the Aphides* themselves. The different kinds of Diptera which he had collected in the latter situation were numerous, some very curiously marked, and others very minute and of brilliant colours.

A memoir, containing descriptions of two species of Sacred Beetles from Southern Africa, was read by J. O. Westwood, F.L.S. &c.

SEBASTEOS, Westwood.

Typus Scarabæorum sacrorum Heliocantharo magis affinis.

- Antennæ articulis 3 et 4, 5to duplò longioribus, 5to et 6to brevibus; clypeus radiatus, subtùs tridentatus. Tibiæ anticæ angulatæ, extùs 4-dentatæ, dentibus 2 apicalibus inter se remotis, intùs serrulatæ, denteque medio armatæ. Tarsi 2 postici articulis subclavatis.
- Species unica, Scarabæus (Sebasteos) Galenus, Westw. Niger, nitidus; capite magno varioloso-punctato, pronoto punctato, margine postico lævi; elytris strid suturali alterisque 5 tenuibus sub lente punctatis. Long. corp. lin. 14.—Hab. in Africâ meridionali. D. Burke.
- SCELIAGES HIPPIAS, Westw. Niger, nitidus; capite sub lente tenuissimè punctato, clypeo cornubus 2 mediis porrectis, pronoto ferè lævi, elytrisque sublævibus et minus nitidis, singulo striis 6 vix discernendis; tibiis anticis haud in medio angulatis, extùs 4-dentatis et serrulatis, metasterno anticè producto. Long. corp. lin. 8.— Hab. cum præcedente.
- February 5th.--George Newport, Esq. (who had been re-elected President of the Society at the Anniversary meeting on the 22nd January), in the Chair.

The President exhibited a specimen of *Hypena rostralis*, which had continued alive in a state of hybernation since the 1st of September last.

Mr. Edward Doubleday exhibited a large box of North American *Lepidoptera*, collected by Mr. Barnstone near the Albany River, in a climate nearly corresponding with that of Lapland, and remarkable on account of a very large proportion of the species being apparently identical with those of this country. Some species and even genera were however quite unlike any of those known in Europe, amongst which was a very large species of *Hepialus*, two new species of *Alypa*, &c., whilst some of the species were evidently identical with those of Florida, thus exhibiting a very wide geographical range.

Mr. F. Bond exhibited a specimen of *Pontia Rapæ*, evidently but recently disclosed from the chrysalis, which he had captured during the month of January. Mr. Walton exhibited a monstrous specimen

* Col. Sykes's observations on the predaceous habits of *D. Sykesii* might lead to the opinion that it was upon the *Aphides* themselves that the *Diopsis* feeds.

of Otiorhynchus picipes, each antenna having only four joints in the funiculus instead of the ordinary number.

The following memoirs were read :---

"Description of a genus and species of Syrphideous Diptera new to Britain." By P. Desvignes, Esq.

- DIDEA, Macquart (Enica? Meigen). Antennæ porrectæ, articulo Stio elliptico, compresso, intus attenuato, setá tertiá parte longitudinis insertá, nudá; oculi nudi; abdomen oblongum, valdè depressum, limbatum; cellula marginalis alarum aperta, submarginalis pediformis.
 - Didea fasciata, Macq. Face and forehead yellow; antennæ inserted on a prominence, black; thorax metallic green with yellow hairs on the sides; scutellum yellowish; abdomen with two large lateral yellow spots on 2nd segment, 3rd and 4th segments with a broad yellow band posteriorly crescent-shaped; four anterior thighs black at base; tibiæ yellow; hind legs and all the tarsi black, the former yellow at the knees; wings hyaline, with a faint tinge of yellow; submarginal and mediastinal cell brown. (Syn. Enica Foersteri?)

This genus approximates to *Eristalis* in having the submarginal cell pediform, and to *Syrphus*, Macq., in having the marginal cell open; but differs from both in its antennæ.

It appears very rare abroad. Taken in October 1841 at Birch Wood. In Mus. Desvignes.

"Descriptions of some new species of the Lamellicorn genus Parastasia, Westw." By Professor Erichson of Berlin.

- Parastasia scutellaria, Erichs. Supra lutea, capite scutelloque nigris, infra nigra, abdominis lateribus luteis. Long. lin. 7.—Hab. in insulâ Riouw, propè Sumatram. Mus. Reg. Berol.
- Parastasia dimidiata, Erichs. Nigra, nitida, elytris postice luteis, pygidio rufo. Long. lin. 4¹/₂.—Hab. in insulâ Riouw. Mus. Reg. Berol.
- Parastasia nitidula, Erichs. Nigra, nitida, elytris fusco-æneis politis. Long. lin. 4.—Hab. in insulå Bintam, propè Sumatram. Mus. Reg. Berol. Omnes sunt genuinæ Parastasiæ.

"Descriptions of some new exotic species of Lucanida." By J. O. Westwood, F.L.S.

- Ægus platycephalus, Guérin MSS. Niger, tenuissimè punctatus, capite et pronoto latissimis; mandibulis capite longioribus, apice falcatis, intus ante medium dente valido, suberecto, obtuso, instructis; pedibus et elytris piceis, his 6-striatis; tibiis 4 posticis in medio 1-dentatis.—Long. corp. mand. excl. lin. 16. Mus. Guérin.
 - Ægus æqualis, Hope MSS. Piceo-niger, capitis et pronoti lateribus magis piceis, lævis, oblongus, elytris 6 punctato-striatis; capite lato; mandibulis capite parùm longioribus falcatis, singulà ad basin dente supero armatá. Long. corp. mand. excl. lin. 11½.
 - Egus Malabaricus, Hope MSS. Niger, elytris opacis punctatissimis, singulo 7-striato; striis alternatis, profundioribus; capite angusto, lateribus angulatis, pronoto ferè quadrato; mandibulis

depressis, capite duplo brevioribus, subtriangularibus, intus dente armatis. Long. corp. (mand. excl.) lin. 10.—Hab. in Malabariâ.

Ægus distinctus, Hope MSS. Niger, nitidus, capite et pronoto elytrorum latitudine; mandibulis falcatis, basi supra dente acuto armatis; pedibus et elytris piceis; his 7-striatis, lateribusque punctatis. Long. corp. (mand. excl.) lin. $12\frac{1}{4}$.

A correspondence between Messrs. Melly and Westwood on the extent of the detrimental effects of insects in dissipating the active principle of vegetable manure was also read.

March 4th .--- The President in the Chair.

The President announced the terms and subjects of the Essays for two prizes of $\pounds 5$ each, offered by the Rev. F. W. Hope, one being upon the natural history and medical properties of vesicatory insects, and the other upon the natural history and early stages of the genus *Stylops*.

The Secretary announced that the Address delivered by the President at the last Anniversary Meeting had been printed for distribution among the Members.

Mr. Evans exhibited a monstrosity in the common moth, Arctia Caia, in which the antennæ and wings of the left side of the body were much smaller than those of the other side, without however showing any appearance of gynandromorphism.

Mr. S. Stevens exhibited a remarkable variety of *Melitæa Euphro*syne, taken at Darenth Wood; likewise varieties of *Fidonia atomaria* and *Cidaria fluctuata*; also a fine specimen of the rare *Charæas nigra*, taken at Leith Hill in September last.

Mr. E. Doubleday exhibited a specimen of a new and large species of *Polyonmatus* from the Missouri, being the fifth species of that genus which inhabits North America.

Mr. Westwood exhibited four hitherto unfigured Assamese species of the genus *Papilio*, which he had received from Major Jenkins (since published in the 'Arcana Entomologica').

He also exhibited a specimen of Crasus septentrionalis with one of the hind feet much smaller than the other, which he regarded as a case of arrested development; and also a large apterous Phasma from Mexico, collected by Mr. Coffin, one of the hind legs of which was also rather smaller than the other, but destitute of the small foliaceous appendages of the femur, tibia and basal joint of the tarsus, and which he regarded as a case of reproduction in consequence of the details given by Mr. Fortnum at the meeting of the Society on the 1st of January last; stating at the same time his opinion, that in those orders of insects which ndergo an incomplete metamorphosis (having active larvæ and pupæ similar to the imago), reproduction of limbs alone takes place, those insects which undergo a complete metamorphosis being considered by him as incapable (so far at least as hitherto observed) of undergoing such a reproduction; and which opinion seemed to be confirmed by the remarks of M. Schneider upon the genus Raphidia, recently published in his elaborate monograph

of that genus. The President, however, was unwilling to admit that the case mentioned by Mr. Westwood was an instance of retarded development, and contended that reproduction was capable of occurring throughout all the orders of insects, as it was now proved to be throughout the Crustacea, Arachnida and Myriapoda; and Mr. Desvignes mentioned the fact recorded by Reaumur, that the hairs of caterpillars, when shaven off previously to moulting, were reproduced on the shedding of the skin. [See the account of Mr. Newport's subsequent experiments on this subject given at the meeting of the 7th October 1844.]

A memoir was read "On the Economy of the genus Palmon, Dalm." By J. O. Westwood, F.L.S.

After alluding to the singular economy by which the female Ichneumonidæ are enabled to introduce their eggs into various substances, within which are contained the insects upon which their larvæ are destined to feed, and giving an extract from an anonymous writer in the Entomological Magazine respecting the production of specimens of one of the *Chalcididæ* from the egg-cases of the *Mantidæ*, the author states that the latter insect evidently belongs to the genus Palmon of Dalman (Swed. Trans. 1825), founded upon a species observed in gum copal, and that the *Priomerus pachymerus* of Walker is another species of the genus; and then illustrates the genus in detail, and describes the following species, the majority of which possess the same singular habits.

- Sp. 1. Palmon bellator, Dalm.
- Sp. 2. Palmon clavatellus, Dalm.
- Sp. 3. Palmon pachymerus (Priomerus pach., Walker).
- Sp. 4. Palmon religiosus, Westw. Niger, subæneus; thorace tenuissimè punctato; antennis nigricantibus, articulo basali luteo; abdomine piceo, subtùs magis luteo, dorso æneo tincto nitido; pedibus luteis, coxis posticis, dentibusque femorum posticorum nigris, oviductu corpore ferè dimidio longiori (\$). Long. corp. lin. 1¹/₂. —Hab. in ovis Mantidis religiosæ. D. Kollar. Mus. Hope.
- Sp. 5. Palmon insularis, Westw. Cupreo-nigricans, vix tenuissimè punctatus, collari magis cuprescenti; antennis nigricantibus, basi fuscis; abdomine chalybæo-nitido, basi subluteo, oviductu vix corporis longitudine; pedibus anticis albidis, femoribus in medio infumatis, coxis et femoribus posticis cupreo-æneis, apice tarsisque albidis (\$). Long. corp. lin. 1¹/₂.—Hab. in ovis Mantidis ex "Ile de France." D. V. Audouin. Mus. Westwood.
- Sp. 6. Palmon fraternus, Westw. Caruleo-viridis, tenuissimè punctatus; antennis crassiusculis luteis, apice fuscescentibus; abdomine purpureo nitidissimo, subtàs luteo, oviductu abbreviato; pedibus luteo-fulvis; coxis et femoribus posticis aneis vel chalybais, apice extremo luteis (♂♀). Long. corp. lin. 1⁴/₄.—Hab. cum præcedente. Mus. Westw.
- Sp. 7. Palmon obscurus, Westw. Niger, aneo vix tinctus, ferè lævis, opacus; antennis nigris, basi articuli 1mi luteo, articuloque apicali albido; abdomine nigro, submetallico, nitido, oviductu corpore ferè dimidio longiori; pedibus 4 anticis piceo-luteis, posticis ni-

gricanti-aneis dentibus validis, tarsis luteis (\mathfrak{Q}). Long. corp. lin. 1 $\frac{1}{2}$.—Hab. King George's Sound. D. Dr. J. Hooker. Mus. Westwood.

Sp. 8. Palmon melleus, Westw. Lætè aurato-viridis, punctatissimus; abdomine melleo; antennis crassis, melleis, apice fuscis; pedibus melleis, coxis posticis, basi viridibus, spinisque femorum posticorum nigris (3). Long. corp. ferè lin. 2.—Hab. in ovis Mantidis Brasiliæ. D. Klug. Mus. Westwood.

Subgenus novum PACHYTOMUS, Westw.

- Palmoni congruit nisi abdomine maris plano depresso-elongato, spinis femorum posticorum tantum 4, articulo basali tarsorum omnium dilatato, necnon œconomiá, habitanti in ficubus more Blastophagarum.
- Sp. 1. Pachytomus Klugianus, Westw. Cupreo-æneus, tenuissinè punctatissimus; antennis basi tantum luteis; abdomine piceo-fulvo apice nigricanti; pedibus 4 anticis pallide flavescentibus, posticis piceis, geniculis luteis. Long. corp. lin. 1½.—Hab. in ficubus Ægypti. D. Klug. Mus. Westwood.

MISCELLANEOUS.

ON THE GENUS SACCOPTERYX OF ILLIGER.

SCHREBER, in his work on Mammalia, described and figured a bat from Surinam under the name of Vespertilio lepturus, remarkable for having on the end of the fore-arm-bone nearest the elbow a peculiar sac. Illiger, from the description (for it does not appear that he ever saw a specimen of the species), as was his habit, formed for this bat a genus which he called Saccopteryx. Geoffroy, who had never seen the species, referred it with doubt to his genus Taphozous, which is peculiar to the old world; and Temminck has followed him, and appears to doubt the accuracy of Schreber's description and figure. Among a most interesting collection of bats, birds and other animals lately sent to the British Museum (collected in various parts of the Brazils by the late Mr. Graham, who with his family was so distressingly lost at Para, just as he was returning home with his very extensive collections and notes elucidating their habits), are two specimens which exactly agree with Schreber's figure. The pouches are about half an inch long, and are convex and bag-like on the lower side of the fore-arm-bone, a short distance from the elbow-joint; they have a slit-like opening on the upper edge of the upper side of the same bone about half an inch long, and the inner surface of the bag is plaited, and appears to secrete an unctuous fluid. From the side of the neck there is a rather thick band which extends to the middle of the bag, and there is another lesser one from the other side of the bag to the edge of the membrane on the front of the wing.

I may observe that *Saccopteryx* is more nearly allied to *Embalonura* than *Taphozous*, and that Cuvier (Règ. Anim. i. 121) considers the existence of this bag in the wing as one of the characters of *Taphozous*; for he observes, "Un petit prolongement de la membrane